IN THE CLAIMS:

Claims 1-13. (Cancelled).

14. (previously presented): A method for producing an optical transmission cable from at least one tube inside of which a plurality of optical fibers are arranged, and strengthening elements, one of the said strengthening elements, constituting a central strengthening member, being arranged at the center of said cable and certain strengthening elements constituting peripheral strengthening members, said at least one tube being twisted about said central strengthening member using a tubular machine so as to form a peripheral layer around said central strengthening member, the peripheral strengthening members and said at least one tube having diameters sufficiently close to each other to ensure said peripheral layer is homogeneous.

15. (currently amended): The method for producing an optical transmission cable according to claim 14, wherein said central strengthening member is first unwound from a reel located in ~~the~~ said tubular machine, then passes through a greasing tank also situated in said tubular machine, and then exits at an end of said tubular machine.

16. (previously presented): The method for producing an optical transmission cable according to claim 14, wherein the optical transmission cable is an aerial cable.

17. (previously presented): The method for producing an optical transmission cable according to claim 16, wherein the optical transmission cable is a ground or phase cable.

18. (previously presented): A tubular machine for producing an optical transmission cable, said machine having a plurality of reels located inside the tubular machine wherein a greasing tank and a guiding device are provided between said plurality of reels and an

end of said tubular machine, arranged whereby a strengthening element unwinding from a reel closest to said greasing tank passes through said greasing tank before exiting at an end of the tubular machine.

19. (previously presented): The tubular machine according to claim 18, wherein the said reel located closest to the greasing tank is designed to receive a central reinforcing member.

20. (previously presented): The tubular machine according to claim 18, wherein all of said reels have the same size whereby said tubular machine maintains a constant diameter.

21. (previously presented): The tubular machine according to claim 19, wherein all of said reels have the same size whereby said tubular machine maintains a constant diameter.

22. (previously presented): A system for producing an optical transmission cable having at least two peripheral layers, comprising an inner peripheral layer and an outer peripheral layer, said outer peripheral layer being twisted about said inner peripheral layer, implementing a method for producing the optical transmission cable from at least one tube inside of which a plurality of optical fibers is arranged, and strengthening elements, one of the said strengthening elements, constituting a central strengthening member, being arranged at the center of said cable and certain strengthening elements constituting peripheral strengthening members, said at least one tube being twisted about said central strengthening member using a tubular machine so as to form a peripheral layer around said central strengthening member, the peripheral strengthening members and said at least one tube having diameters sufficiently close to each other to ensure said peripheral layer is homogeneous.

23. (previously presented): The system for producing an optical transmission cable according to claim 21 employing, to implement said method, a tubular machine having a

plurality of reels located inside the tubular machine wherein a greasing tank and a guiding device are provided between said plurality of reels and an end of said tubular machine, arranged whereby a strengthening element unwinding from a reel closest to said greasing tank passes through said greasing tank before exiting at an end of the tubular machine.

24. (previously presented): The system according to claim 22, wherein the two peripheral layers are provided using two tubular machines arranged one after the other.

25. (previously presented): The system according to claim 22, wherein the two peripheral layers are obtained using two separate steps employing two tubular machines.

26. (previously presented): The system according to claim 22, wherein the inner peripheral layer is obtained using a tubular machine and said outer peripheral layer is obtained using a planetary machine, the tubular machine and planetary machine being arranged one after the other.

27. (previously presented): The system according to claim 22, wherein the said inner peripheral layer is produced during a first step using a tubular machine and said outer peripheral layer is produced during a second step separate from said first step, using a planetary machine.

28. (previously presented): The system according to claim 24, wherein the said two machines rotate in mutually opposite directions.

29. (previously presented): The system according to claim 25, wherein the said two machines rotate in mutually opposite directions.

30. (previously presented): The system according to claim 26, wherein the said two machines rotate in mutually opposite directions.

31. (previously presented): The system according to claim 27, wherein the said two machines rotate in mutually opposite directions.